

FIG. 1

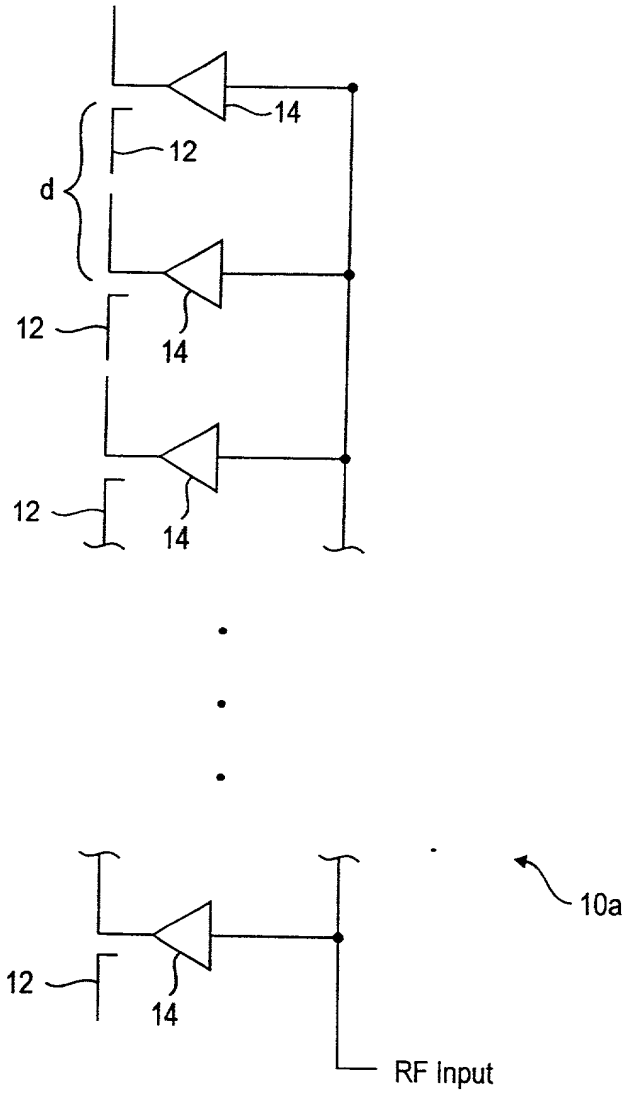


FIG. 2

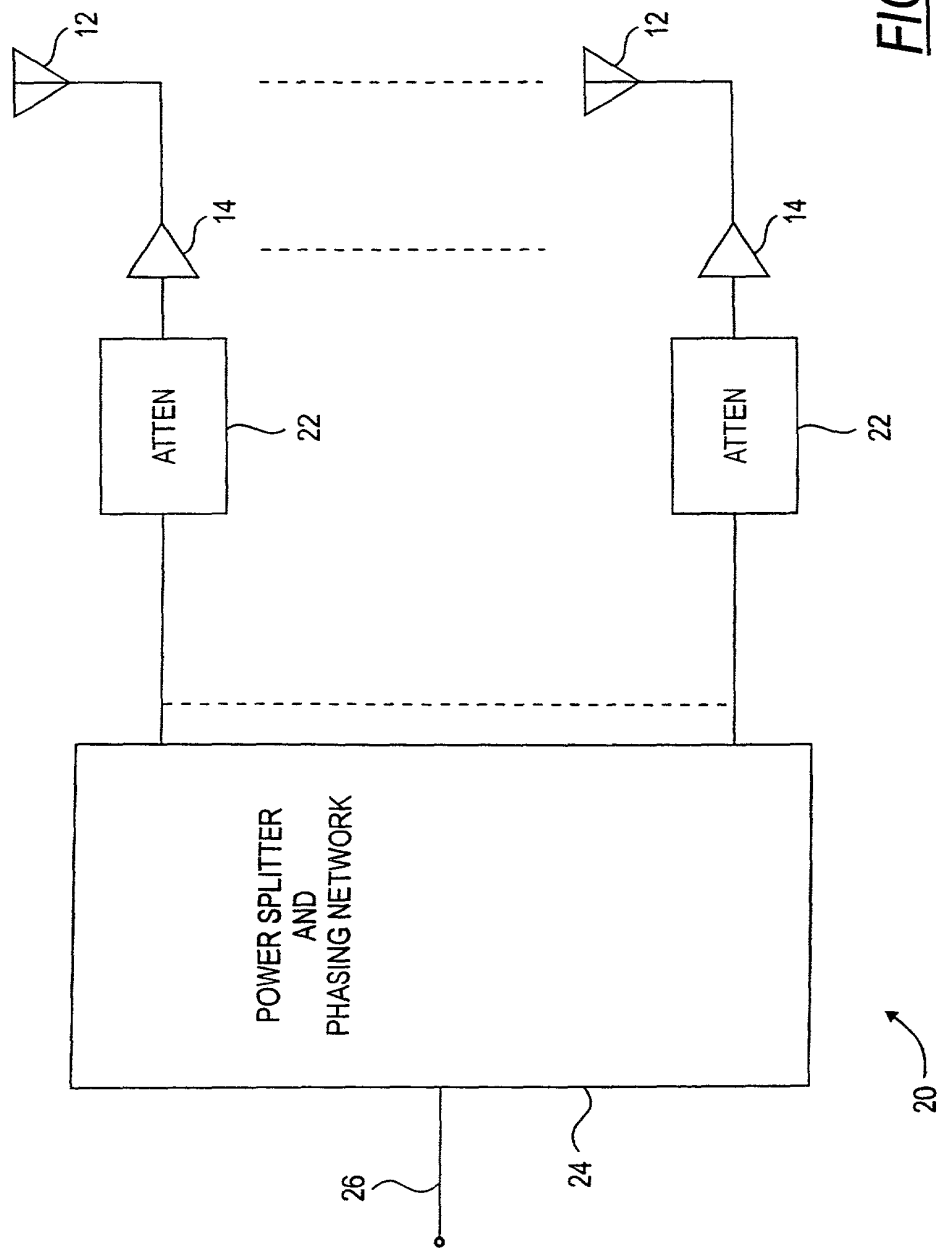
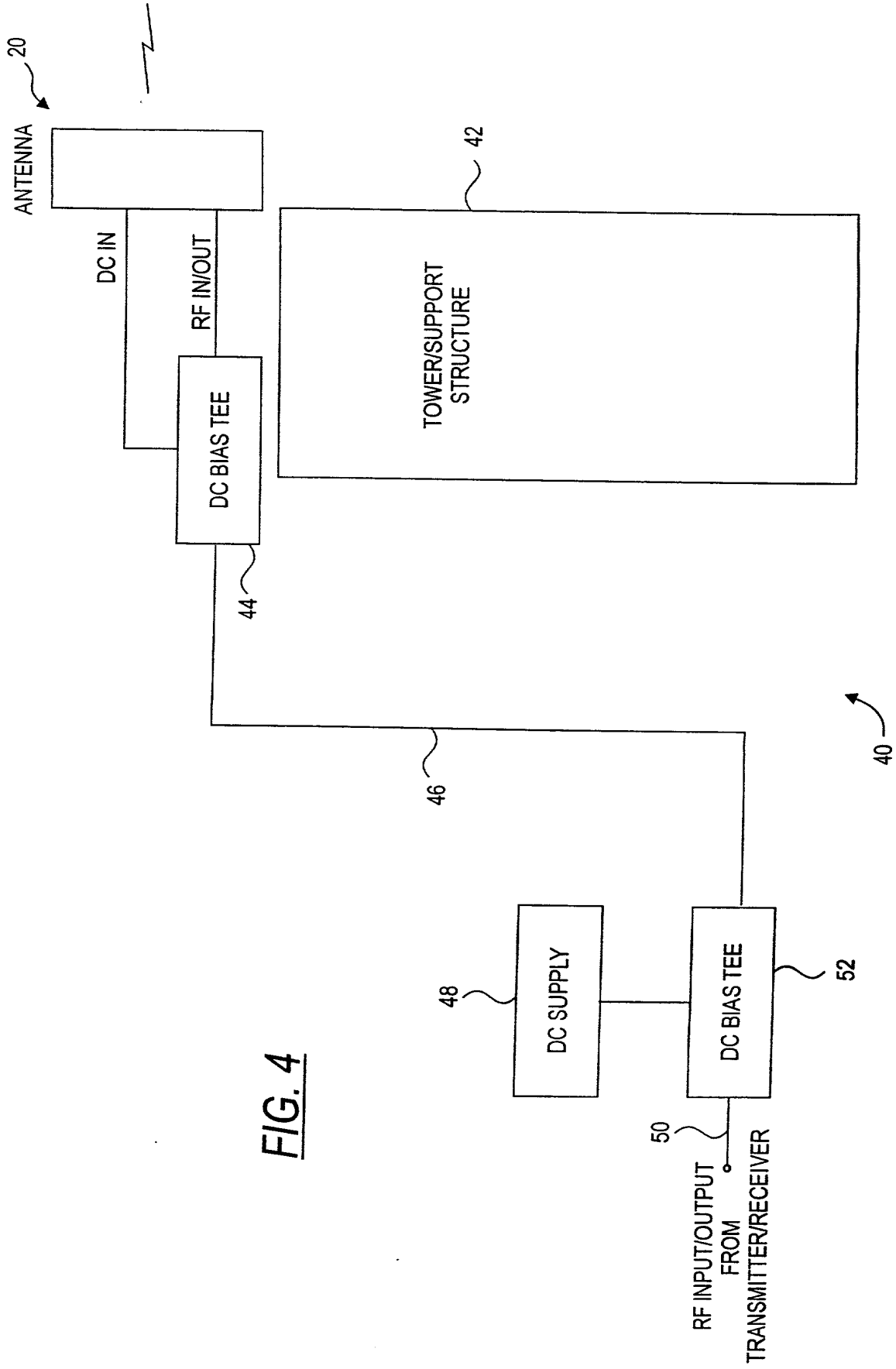


FIG. 3

FIG. 4 is a block diagram of a system 40 for providing DC bias to an antenna 20. The system 40 includes a DC supply 48 connected to a DC bias tee 52. The DC bias tee 52 is connected to a tower/support structure 42 and a DC bias tee 44. The DC bias tee 44 is connected to the antenna 20 via a DC IN line. The DC bias tee 52 is also connected to an RF input/output from a transmitter/receiver 50 via an RF line 46. The tower/support structure 42 is connected to the DC bias tee 44 via an RF IN/OUT line.

FIG. 4



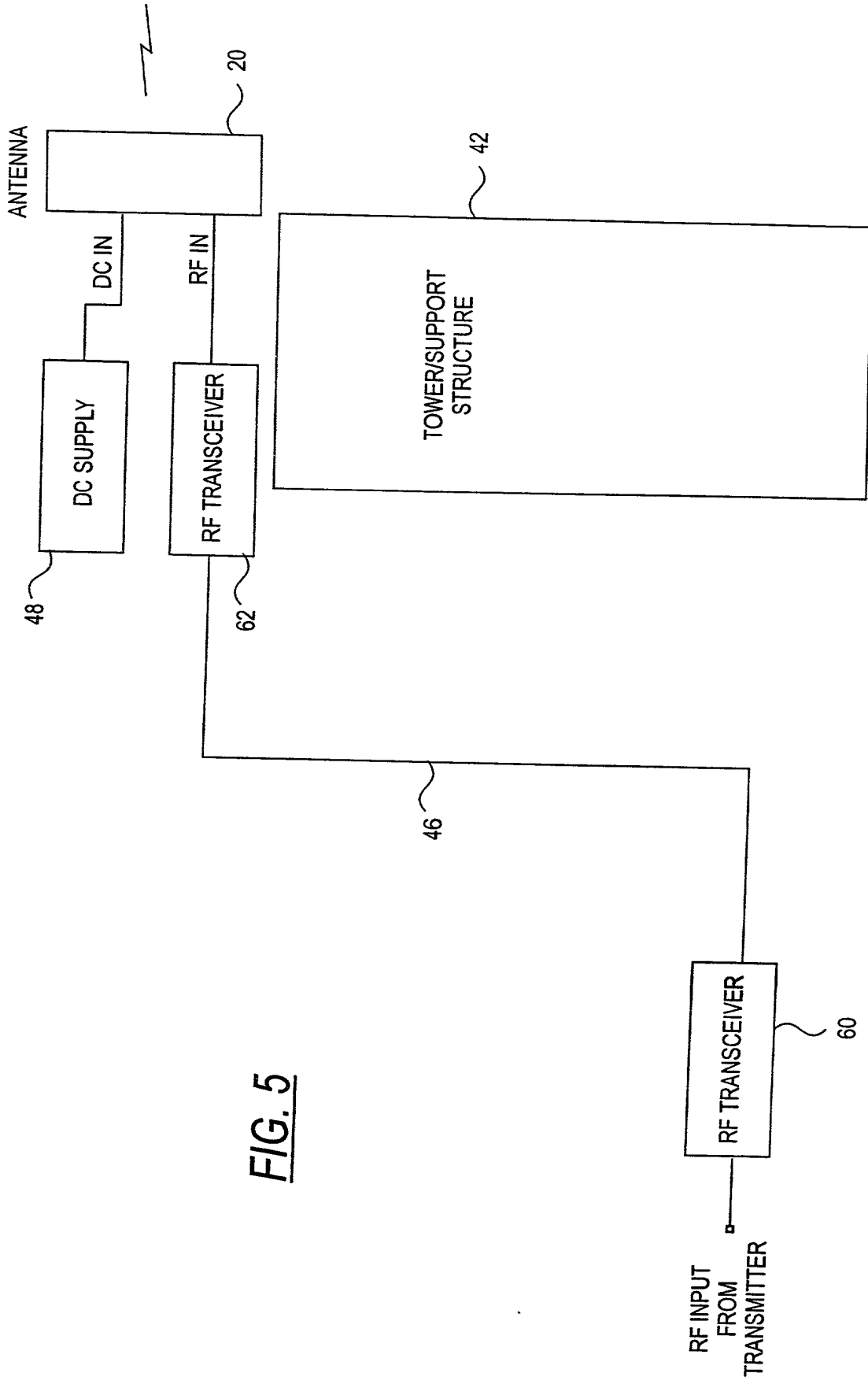


FIG. 7 is a block diagram of a system for providing a DC bias to an antenna. The system includes a DC supply 48, a DC bias tee 72, an RF coaxial cable 74, a DC bias tee 70, and an antenna 20. The DC supply 48 is connected to the DC bias tee 72. The RF input/output from a transmitter is connected to the DC bias tee 72. The DC bias tee 72 is connected to the RF coaxial cable 74. The RF coaxial cable 74 is connected to the DC bias tee 70. The DC bias tee 70 is connected to the antenna 20. The antenna 20 is also connected to a DC input (DC IN) and an RF input (RF IN).

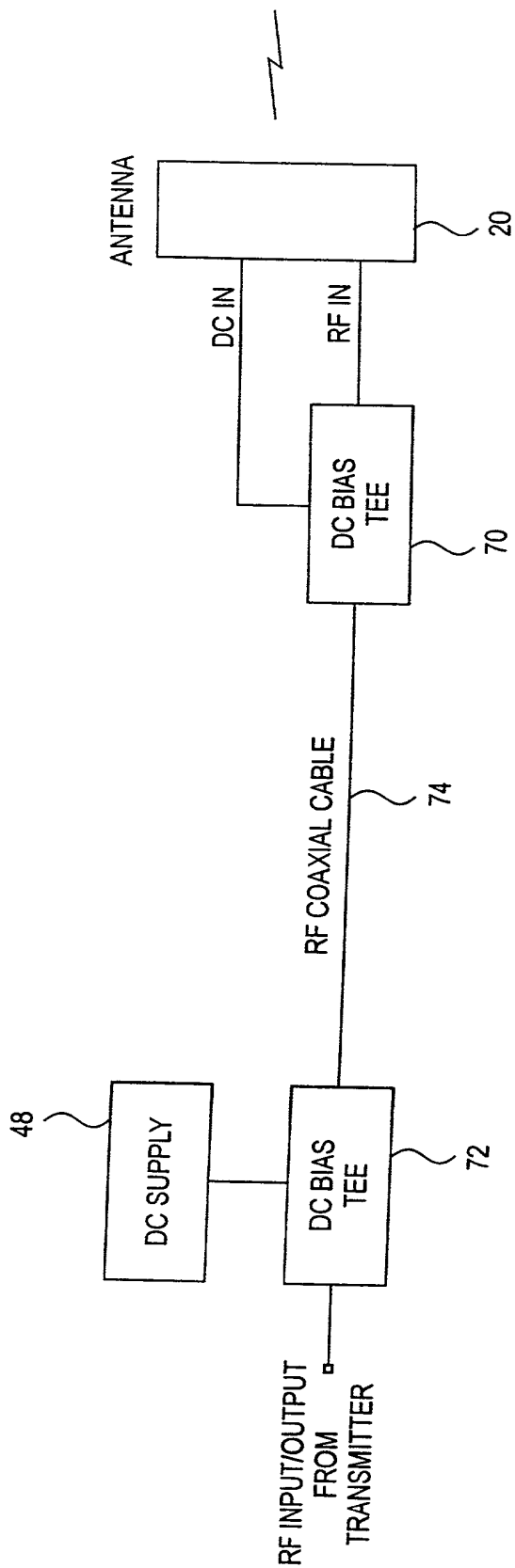


FIG. 7

FIG. 8 is a block diagram of a system for transmitting and receiving RF signals via an optical fiber cable. The system includes a DC supply (48), an RF-fiber transceiver (84), an optical fiber cable (82), another RF-fiber transceiver (80), and an antenna (20). The DC supply (48) provides power to both RF-fiber transceivers (84 and 80) and the antenna (20). The RF-fiber transceiver (84) receives an RF input from a transmitter and converts it to an optical signal for transmission over the optical fiber cable (82). The optical fiber cable (82) carries the optical signal to the second RF-fiber transceiver (80), which converts it back to an RF signal for the antenna (20) to transmit.

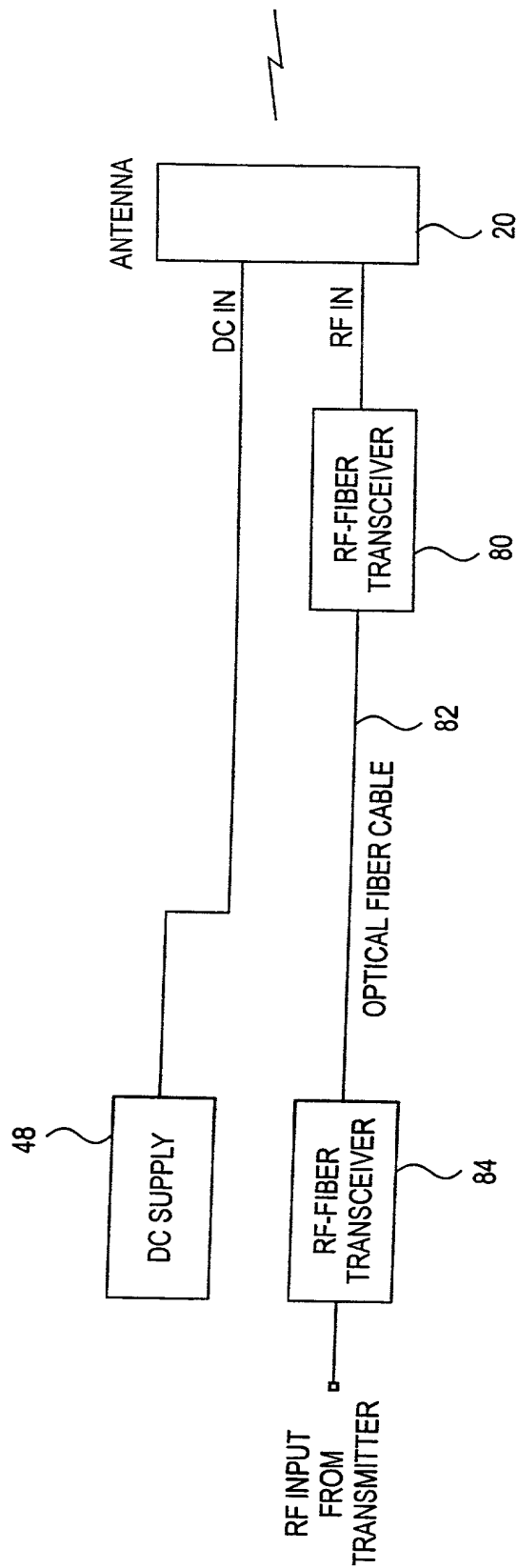


FIG. 8

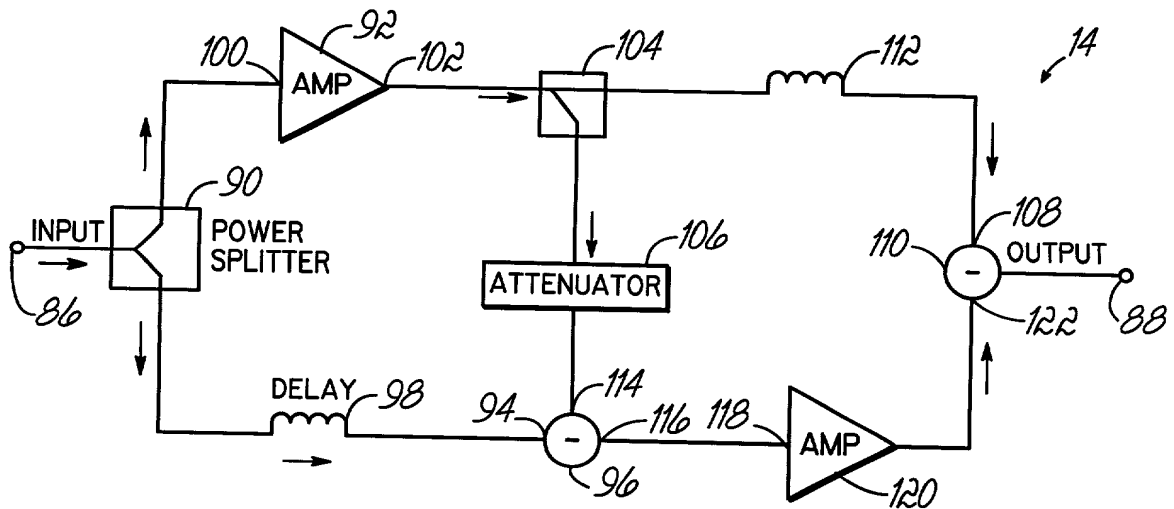


FIG. 9